IN THE CLAIMS

Please amend the claims as follows:

1. (previously presented) A method for performing input/output (I/O) floor planning on an integrated circuit design, said method comprising:

collecting design data related to an I/O circuit of said integrated circuit design from a plurality of libraries, customer specifications and design databases;

sorting said collected design data for optimizing simulations of said I/O circuit under operating conditions;

determining whether or not a simulation is required for said I/O circuit before performing I/O floor planning on said I/O circuit;

in response to a determination that a simulation is required on said I/O circuit before performing I/O floor planning on said I/O circuit,

sending said collected design data to a simulation interface;

choosing an I/O behavioral model and a package model by said simulation interface based on said collected design data on said I/O circuit;

dynamically building a simulation deck by said simulation interface using said chosen models along with appropriate operating conditions; and

receiving simulation results by said simulation interface from a circuit simulator after a simulation had been performed by said circuit simulator using said simulation deck containing said chosen I/O behavioral model and said operating conditions; and

performing I/O floor planning for said I/O circuit based on said received simulation results.

- 2. (original) The method of Claim 1, wherein said method further includes dynamically analyzing simulation results based on user defined criteria.
- 3. (original) The method of Claim 1, wherein said collecting further includes collecting design specification from a customer's environment condition.
- 4. (previously presented) The method of Claim 1, wherein said sorting further includes sorting said collected design data according to a frequency of operation of said I/O circuit.
- 5. (previously presented) A system for performing input/output (I/O) floor planning on an integrated circuit design, said system comprising:

means for collecting design data related to an I/O circuit of said integrated circuit design from a plurality of libraries, customer specifications and design databases;

means for sorting said collected design data for optimizing simulations of said I/O circuit under operating conditions;

means for determining whether or not a simulation is required for said I/O circuit before performing I/O floor planning on said I/O circuit;

in response to a determination that a simulation is required on said I/O circuit before performing I/O floor planning on said I/O circuit,

means for sending said collected design data to a simulation interface;

means for choosing an I/O behavioral model and a package model by said simulation interface based on said collected design data on said I/O circuit;

means for dynamically building a simulation deck by said simulation interface using said chosen models along with appropriate operating conditions; and

means for receiving simulation results by said simulation interface from a circuit simulator after a simulation had been performed by said circuit simulator using said simulation deck containing said chosen I/O behavioral model and said operating conditions; and

means for performing I/O floor planning for said I/O circuit based on said received simulation results.

- 6. (original) The system of Claim 5, wherein said system further includes means for dynamically analyzing simulation results based on user defined criteria.
- 7. (original) The system of Claim 5, wherein said means for collecting further includes means for collecting design specification from a customer's environment condition.
- 8. (previously presented) The system of Claim 5, wherein said means for sorting further includes means for sorting said collected design data according to a frequency of operation of said I/O circuit.

Please cancel Claims 9-12.